GRADE 3-4 QUESTIONS AND SOLUTİONS

Q1:

$$\begin{array}{r} 3\,A\,5\,4 \\ 2\,6\,2\,B \\ +\ C\,7\,9\,3 \\ \hline 7\,7\,7\,4 \end{array}$$

According to the question above, what is A + B + C = ? (1 points)

A) 7 B) 9 C) 10 D) 11

ANSWER IS D

SOLUTION:

Q1: Starting from the ones digit, we need to check each addition operation.

4 + B + 3 = 4 or 4 + B + 3 = 14

The first option is impossible because in tens digit we had extra one ten. So, we will consider the second option.

So, 7 + B = 14, then B = 7

In hundreds digit, A + 6 + 7 = 17 but we had an extra one hundred from tens digit, so

A + 6 + 7 + 1 = 17, then A = 3

In thousands digit, 3 + 2 + C = 7, but we had an extra one thousand from hundreds digit

So, 1 + 3 + 2 + C = 7, then C = 1

A = 3, B = 7, and C = 1

Total = 3 + 7 + 1 = 11

Q2: 1899 + MNP = ●

1217 + 1666 = ▲

If ● = ▲ then find MNP. (2 points)

A) 943 B) 498 C) 894 D) 984

ANSWER IS D

SOLUTION:

Q2: To find MNP, we need to find the value of the triangle first.

1217 + 1666 = 2883, which equals ▲

The value of the triangle equals the value of the circle which is 2883.

1899 + MNP = 2883

To find MNP, we need to use the inverse operation of addition, that is subtraction.

2883 – 1899 = MNP

2883 – 1899 = 984 = MNP

Q3:

6, ★, 20, ●, 34, 41, ...

According to the number pattern given above, how much more is ● than ★ ? (3 points)

A) 14 B) 15 C) 16 D) 17

ANSWER IS A

SOLUTION:

Q3: To find their value, we need to find the rule of the pattern first.

The difference between 41 and 34 is 7.

Therefore, the rule of the pattern is adding 7 for the next term.

6 + 7 = ★

So, ★ = 13

20 + 7 = ●

So, ● = 27

To find their difference, we need to subtract 14 from 27.

27 – 13 = 14

Q4:

A greengrocer bought 148 crates of tomatoes to sell. Each crate contained 19 kg of tomatoes. The greengrocer wants to sell these tomatoes in 4 kg packages. How many packages does he need? (4 points)

A) 703 B) 73 C) 42 D) 402

ANSWER IS A

SOLUTION:

Q4: Calculate the total weight of the tomatoes:

Total weight = 148 crates × 19 kg/crate = 2812 kg

Calculate the number of 4 kg packages needed:

Number of packages = 2812 kg ÷ 4 kg

= 703 packages

So, the greengrocer needs 703 packages.

Q5:

– Jack is older than Lily.

– Lily is younger than Alex, but older than Melissa.

– Alex is older than Jack.

According to this, if we rank these children from oldest to youngest, who will be in 2nd place? (5 points)

A) Jack B) Lily

C) Alex D) Melissa

ANSWER IS A

SOLUTION:

Q5: To solve this, we need to determine the relative ages of all the children:

1. Jack (J) is older than Lily (L).

- J > L

2. Lily (L) is younger than Alex (A), but older than Melissa (M).

- A > L > M

3. Alex (A) is older than Jack (J).

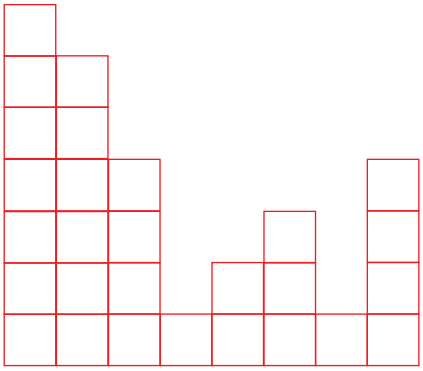
- A > J

Combining all the information:

- A > J > L > M

Thus, in the order from oldest to youngest, the second oldest child is Jack (J).

Q6:



The above figure is made up of square pieces. What is the minimum number of additional square pieces needed to complete the figure into the smallest possible rectangle? (6 points)

A) 24 B) 28 C) 30 D) 32

ANSWER IS B

SOLUTION:

Q6: The length of the rectangle contains 8 squares. The width of the rectangle contains 7 squares. The formula of area of a rectangle is length x width.

A = 8 squares x 7 squares = 56 squares^2

In this figure above, there are 28 squares in total.

To complete 56 squares, 28 squares are needed.

56 – 28 = 28

Q7:

Brian has $125 more than Alexa; Simon has $105 less than Alexa. If the three friends have a total of $740, how much money does Brian have? (7 points)

A) 240 B) 365 C) 135 D) 260

ANSWER IS B

SOLUTION:

Q7: Let's define the variables:

- Let A be the amount of money Alexa has.
- Brian has A + 125
- Simon has A – 105

The total amount of money they have is $740. Therefore, we can set up the equation:

A + (A + 125) + (A – 105) = 740

Combine like terms:

3A + 20 = 740

Subtract 20 from both sides:

3A = 720

Divide by 3:

A = 240

Now, we can find how much money Brian has:

A + 125 = 240 + 125 = 365

So, Brian has $365.